97-84023-21

Guaranty Trust Company of New York

Canada; economic position and plans for ...

[New York]

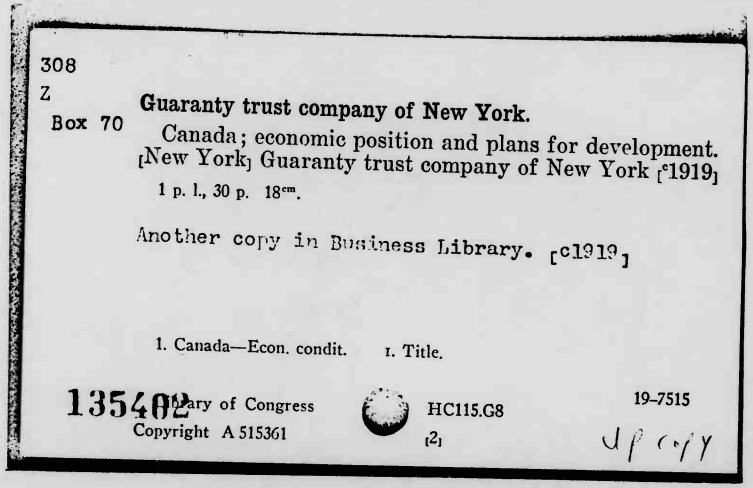
[c1919]

97-84023-21
MASTER NEGATIVE #

COLUMBIA UNIVERSITY LIBRARIES
PRESERVATION DIVISION

BIBLIOGRAPHIC MICROFORM TARGET

ORIGINAL MATERIAL AS FILMED - EXISTING BIBLIOGRAPHIC RECORD



308
Z
Box 70

Guaranty trust company of New York.
Canada; economic position and plans for development.
[New York] Guaranty trust company of New York [c1919]
1 p. l., 30 p. 18cm.

Another copy in Business Library. [c1919]

1. Canada—Econ. condit. I. Title.

135402

Library of Congress
Copyright A 515361

HC115.G8
[2]

19-7515

RESTRICTIONS ON USE: *Reproductions may not be made without permission from Columbia University Libraries.*

TECHNICAL MICROFORM DATA

FILM SIZE: 35 mm REDUCTION RATIO: 9:1 IMAGE PLACEMENT: IA (IIA) IB IIB

DATE FILMED: 2-12-97 INITIALS: FB

TRACKING # : 2164

FILMED BY PRESERVATION RESOURCES, BETHLEHEM, PA.

308
Z
Bx 70

Canada

Economic Position and Plans for Development

Guaranty Trust Company
of New York

This book is due two weeks from the last date stamped below, and if not returned at or before that time a fine of five cents a day will be incurred.

JUL 20 1935

3082 Box 70
Preliminary Report of the Comm. appointed by the Natl Tax Assn. to prepare a plan of model system of state & local tax.

JUN 22 1935
J. B. Williams

JUL 8 1935
J. B. Williams
C945

Canada

Economic Position and Plans for Development

Guaranty Trust Company of New York
140 Broadway

FIFTH AVENUE OFFICE
Fifth Avenue and 43rd Street

MADISON AVENUE OFFICE
Madison Avenue and 60th Street

LONDON OFFICES
32 Lombard Street, E. C.
5 Lower Grosvenor Pl., S.W.

PARIS OFFICE
Rue des Italiens, 1 and 3

COPYRIGHT, 1919
GUARANTY TRUST COMPANY OF NEW YORK

13 March, 1920 - C. R. W.

Canada

Economic Position and Plans for Development

OF those portions of the globe to which its inhabitants are now turning to obtain, through development of natural resources and expansion of economic life, reparation for the damages of war, and restoration of world-wide prosperity, none holds larger promise than Canada. It is a land of tremendous possibilities, not only for those who live there and the people of the Western Hemisphere generally, but also for the world at large, stricken in many quarters as it is and oppressed everywhere by the magnitude of burdens accumulated during the last four years.

Canada enters upon the period of readjustment to a peace basis with the consciousness of having accomplished extraordinary things during the war, not the least of which was a swift passage to that stage of economic life where the basic industry of agriculture is enlarged by intensive effort, and manufactures have advanced to an extent indicative of ability to provide beyond domestic needs. Such a result was obtained under the pressure of a demand calculated to enlist to the uttermost the skill and energy of the Dominion. With equal enthusiasm her people are turning now to the exercise of those

qualities in their problem of holding to the benefits that have accrued to them and realizing the implications of their achievements.

There is ample justification for their belief that they have not set themselves an impossible task. Sparse as is the Canadian population just now in comparison with the extent of territory; inadequate as is their industrial organization compared with that of the United States, or Great Britain, or France, or Japan; difficult as it may be under the conditions likely to prevail for some years to come to finance the multifarious operations incident to a general and simultaneous development of agriculture, mining, manufacturing, and commerce, both domestic and foreign; the attitude of the Canadians themselves and the estimation in which they are held by the United Kingdom and the United States give assurance that their aspirations will be encouraged in a very substantial way both at home and abroad. Already there are under consideration plans by which Canada will conserve her labor supply and, by her intelligent treatment of the immigrant, foster its increase. Every effort is being made to readjust the industrial organization, which war conditions called forth, to a peace basis, without loss of time or efficiency. As for the problems of finance the Canadian banks are establishing additional branches in sections where their services are likely to be required, foreign offices are being set up to handle export and import trans-

actions, and foreign institutions are establishing branches in Canada. Altogether there is well under way the construction of the necessary machinery for business on such a scale as Canada contemplates.

Agricultural Productions

The natural resources which it is proposed to develop are immense in extent and variety. Agriculture is, and will long continue to be, the chief industry of the country, whatever progress may be made in manufactures. It has been greatly stimulated during the war both in the direction of a diversity of crops and in the manner of their cultivation. As the labor supply diminished with the continuance of the war, intensive methods of farming became necessary. During the year 1918 there was a marked tendency toward mixed farming, which was reflected in a reduced production of wheat and oats. The estimated yield in bushels of crops for 1918 as compared with 1917 is as follows:

CROPS	1917	1918
Wheat	233,742,850	189,301,350
Oats	403,009,800	380,273,500
Barley	55,057,750	77,290,240
Rye	3,857,200	8,496,700
Peas	3,026,340	3,110,100
Beans	1,274,000	3,568,380
Buckwheat	7,149,400	11,428,500
Flax	5,934,900	5,972,200
Mix Grains	16,157,080	35,730,300
Corn for husking	7,762,700	14,214,200

CROPS	1917	1918
Potatoes	79,892,000	104,512,700
Turnips, etc. . . .	63,451,000	130,989,600
Hay and Clover .	13,684,700 (tons)	14,681,400
Fodder corn . . .	2,690,370 (tons)	4,776,000
Sugar beets . . .	117,600	180,000
Alfalfa.	262,400 (tons)	446,400

The production of crops is likely to be stimulated by the plans now being made to settle soldiers returning from Europe and war workers at home as farmers on the vast stretches of land hitherto undeveloped. A census taken at the front in 1917 showed that of 230,000 Canadian soldiers interviewed, 105,000 expressed a desire to become farmers after the war. Of these, 78,000 had had previous experience. Canada feels that the returning soldiers have a special claim upon her and that by treating them liberally in the matter of land grants she will not only meet an obligation, but also will contribute to the general prosperity, on the theory that when agriculture is prosperous the other industries will be also.

Forest Resources

The forest products of Canada rank next to those of agriculture in value of production, the total for the last year being estimated at $175,000,000. In value of forest resources Canada is surpassed only by Russia and the United States. The forest belt extends across the country a distance of nearly 4,000 miles, with an average breadth of about 700 miles,

giving an approximate area of 2,500,000 square miles. The nominal forest area has been estimated at 1,000,000,000 acres and the actual available area of merchantable timber at 200,000,000 acres. The supply of merchantable timber is about one-fourth of the supply available in the United States. There are forty-five principal commercial woods produced. More than one-half of the standing timber of the Dominion is in British Columbia, where is the largest and most compact area of merchantable standing timber left in the world today. The area covers more than 180,000,000 acres and the amount of timber is estimated at nearly 400,000,000,000 feet. The value of forest products exported during 1918 is estimated at $65,436,204 as compared with $52,280,875 in 1917.

The manufacture of wood pulp has become an important industry, having increased more than 250 per cent. during the last ten years. The output of wood for pulp manufacture in 1908 was 482,777 cords, with a value of $2,931,653. In 1917 the output was 2,101,356 cords, and the value $18,788,333. The pulp wood resources of the country are estimated at 1,033,370,000 cords.

Metals and Minerals

Canada is well supplied with important metals and minerals and the studies which have been made during the war by the Imperial Munitions Board are expected to result in a large exploitation of them.

The Dominion Government has appropriated $200,000 for making the experiments with lignite as a substitute for anthracite recommended by the Council for Scientific and Industrial Research, and a similar sum has been provided by Manitoba and Saskatchewan. Canada is largely dependent upon other countries for oils but an effort is now being made to develop deposits in Western Canada. The quantity and value of some of the important mineral productions during 1917 follow:

MINERAL	QUANTITY	VALUE
Cobalt	1,089,134 pounds	$1,742,614
Copper	108,860,358 pounds	29,588,254
Gold	747,366 ounces	15,449,426
Lead	32,072,269 pounds	3,571,889
Molybdinite	271,530 pounds	271,530
Nickel	84,470,970 pounds	33,778,388
Platinum	49½ ounces	5,090
Silver	22,150,680 ounces	18,034,419
Zinc	31,227,351 pounds	2,779,547
Asbestos	144,185 tons	7,215,389
Chromite	36,352 tons	490,001
Coal	14,015,588 tons	47,643,646
Graphite	3,714 tons	402,892
Gypsum	339,418 tons	887,170
Magnesite	58,090 tons	728,275
Mica	2,401,629 pounds	366,587
Natural Gas	26,465,686 cubic feet	5,003,342
Pyrilis	403,243 tons	1,586,091
Salt	138,909 tons	1,047,792
Portland Cement	4,768,488 tons	7,669,521
Lime	6,338,212 bushels	1,517,918

The total value of Canada's mineral productions in 1917 was nearly $193,000,000. There are many minerals not included in the above compilation which are known to exist in large amount, but which have not yet been developed in commercial quantities. The output of the principal mining industries in 1918 was about the same as during 1917 because of a shortage in labor supply, but the value increased considerably, being estimated at $220,000,000. The production of coal during 1918 is estimated at 15,180,000 short tons. The estimated production of the more important metals during 1918 is estimated as follows:

> Gold, $14,750,000 in value; silver, 20,800,000 ounces; copper, 117,000,000 pounds; nickel, 91,500,000 pounds; zinc, 36,000,000 pounds; pig-iron, 1,182,000 short tons.

The Fisheries

During the war much more attention than formerly was given by the Canadians to their fisheries, because of the realization that in them the country possessed an offset to the world shortage of food. The suggestion is now made that the Government turn to them as a debt paying source, and under the direction of the Dominion Fish Committee plans are being made to exploit both the Atlantic and Pacific coasts and the lakes in Alberta, Saskatchewan, and Manitoba. There are 5,000 miles of coast-line on the Atlantic and 7,000 miles on the Pacific. The inland fisheries

cover 200,000 square miles of fresh water, or half the fresh water area of the world. Not including the vast quantity of fish caught of which no record is kept, the value of fish marketed by Canadians in 1917 was $52,352,044, of which the sea fisheries contributed $47,052,605 and the inland fisheries, $5,299,439. Nearly 100,000 men were employed in the industry and the value of the equipment used was estimated at $33,520,748. The Council for Scientific and Industrial Research has been studying the utilization of the great quantities of fish waste. It is estimated that 300,000 tons of fish offal and non-marketable fish are annually allowed to go to waste and that the fish oil which could be obtained from this waste would be worth nearly $6,000,000 at current market prices, while other by-products would reach a value of several hundred thousand dollars more.

Railroads

There are eighty-three steam railroads in Canada with a total mileage of 51,359.74. Their capital stock is valued at $1,089,114,875 and their funded debt at $896,005,116, a total investment of $1,985,119,991. Their gross earnings, as of June 30, 1917, the latest available, were $310,771,479; operating expenses totalled $222,890,637; and net operating revenue, $89,892,502. In 1917 the number of passengers carried was 53,749,680 and the number of tons of freight, 121,916,272.

Under the title of the Canadian Government Railways there are now operated 13,364 miles of steam railroads, the larger part of this comprising the Canadian Northern Railway, which was taken over by an Act of the Dominion Parliament last year at an award price of $10,800,000, but which is still being operated by the organization built up by those who formerly owned the road. The highly successful Canadian Pacific Railway is still privately owned and operated, but suggestions have been made that it be acquired by the Government. In this connection consideration has also been given to the possibility of bringing all the railroads under Government ownership, but with the operation in the hands either of the Canadian Northern or the Canadian Pacific organization.

The chief railroads of Canada are indexes of the extent of that country and a glance at a map will show that they still fall far short of reaching into every section of the country where commercial possibilities exist. The Canadian Northern Railway system comprises more than 9,296 miles, distributed as follows:

Nova Scotia	369.9 miles
Quebec	626.77 miles
Ontario	2,219.1 miles
Manitoba	1,989.1 miles
Saskatchewan	2,178.1 miles
Alberta	1,181.21 miles
British Columbia	516.4 miles
State of Minnesota	215.42 miles

The Canadian Pacific System has in operation 13,772.1 miles and in addition controls the Minneapolis, St. Paul, and Saulte Ste. Marie Railroad, with a mileage of 4,227.8, and the Duluth, South Shore, and Atlantic Railroad, with a mileage of 625.8, giving a total of 4,853.6 miles. The Grand Trunk system, exclusive of the Grand Trunk Pacific Railway, comprises 8,107 miles. It has 1,083 miles of double track, including the longest continuous stretch of double track railway under one management in the world. The Grand Trunk Pacific Railway operates 2,804 miles.

There are 2,277.9 miles of electric railway in Canada, with a total capital of $161,234,739, of which $70,606,520 is in stocks and $90,628,219 in bonds. Gross earnings as of June 30, 1917 were $30,237,663. The total income from operation was $12,431,229 and the net earnings from operation were $10,196,985.

Manufactures

Canadian manufacturing developed rapidly during the progress of the war. There was an enormous demand for all products and the building of new plants or the extension of old ones proceeded rapidly. Now the country finds itself impelled toward a continuance of this development in order to reduce the necessary importations of a new and growing country, to pay off war debts, and to provide employment for her returning soldiers or those whose services as munition

workers are no longer required. A difficulty in the way is the necessity that basic industries shall be able to put forth diversified products. The ability to concentrate on specialized products, which permits of quantity production at low cost in more industrially advanced countries, is denied to Canada for the present. Her builders must be able, for example, to obtain at one and the same plant structural steel, boiler plates, wire nails, or any other steel product which they may require. In an undeveloped country, where communities are widely separated and where population is not congested, the general manufacturing plant is as necessary as the general store. No other kind will serve the community, and no other kind can support itself. A handicap is therefore placed upon Canadian manufactures by the very nature of the country and the sparseness of its population. To meet this condition, as to meet many others, there is foreign trade, and a great deal of attention is accordingly being given to it. Manufactures will grow with the assurance that surplus production can be marketed abroad.

The Dominion Bureau of Statistics recently completed its census of the manufactures of Canada for the year 1917. The returns cover 34,380 establishments and show how remarkable has been the development in this branch of Canadian industry since 1915. The following table sets forth these contrasts:

	1917	1915
Capital invested	$2,772,517,680	$1,994,103,272
Employes on salaries	73,598	52,683
Salaries paid	$95,983,506	$60,308,293
Employes on wages (including piece workers)	619,473	462,200
Wages paid	$457,245,456	$229,456,210
Cost of Materials	$1,602,820,631	$802,133,862
Value of Products	$3,015,506,869	$1,407,137,140

The gross value of goods made in Canada in 1917 amounted to $3,015,506,869 and the cost of material was $1,602,820,631, leaving a net value added by the process of manufacture of $1,412,686,238, or $5,449,098 more than the gross value of production in 1915. The twenty leading industries with the gross and net values of their production are given below in order of precedence:

	Value	
	GROSS	NET
Flour and grist mill products	$224,191,735	$40,604,799
Steel furnaces and rolling mills	170,679,000	62,040,044
Slaughtering and meat packing	153,279,252	36,082,497
Log products	115,884,905	75,159,877
Munitions	112,866,838	70,240,233
Pulp and paper	96,340,324	61,627,462
Butter and cheese	85,731,339	13,710,662
Cars and car works	78,564,527	39,884,077
Bread, biscuits, and confectionery	77,223,581	33,022,111
Sugar refined	73,139,260	20,149,349
Smelting	69,262,167	33,591,253
Foundry and machine shop production	66,945,483	43,322,382

	Value	
	GROSS	NET
Iron and steel production	59,797,766	26,777,534
Building and contracting	54,668,255	32,927,335
Automobiles	54,466,273	18,880,453
Slaughtering, not including meat packing	53,441,466	14,771,901
Boots and shoes	49,170,062	22,389,519
Electric light and power	44,536,848	44,536,848
Leather—tanned, curried, and finished	41,117,128	14,492,651
Electric apparatus and supplies	40,204,245	20,046,238

The totals of the twenty leading industries in gross and net value of production were $1,720,700,960 and $724,266,227, and they represent respectively 57 per cent. and 51 per cent. of the grand totals for the Dominion.

The total capital invested in Canadian industrial plants in 1917 was $2,772,517,680, of which

(a) Land, buildings, and fixtures amounted to $998,351,070,
(b) Machinery and tools to $567,262,538,
(c) Materials on hand, stocks in process, finished products, fuel, and miscellaneous supplies to $745,546,310, and,
(d) Cash, accounts, and bills receivable to $461,357,762.

The amount of capital invested in the leading industries was:

(1) Electric light and power, $356,004,168;
(2) Pulp and paper, $186,787,405;
(3) Log products, $149,266,019;
(4) Cars and car works, $98,274,585;
(5) Steel furnaces and rolling mills, $91,894,777;
(6) Flour and grist mill products, $72,573,982;
(7) Agricultural implements, $70,493,801;

(8) Foundry and machine shop products, $69,915,032;
(9) Car repair shops, $68,763,298;
(10) Slaughtering and meat packing, $68,145,347.

Foreign Trade

For the last four years Canada has had a favorable trade balance, due largely, of course, to her shipments of foodstuffs and munitions. In respect of the latter it may be said that Canadian steel manufactures increased 125 per cent. during the war and that whereas at the beginning of the war no Canadian manufacturer had ever made a shell, or a cartridge case, or a fuse, the country was furnishing, during the latter part of 1917, no less than 55 per cent. of all shrapnel shells and 42 per cent. of all 4.5 shells used by the British Army. From the time the Imperial Munitions Board was established as the agent for the Imperial Government in December, 1915, orders for upward of 65,000,000 shells, of a value of $937,456,826, were placed in the country. With the signing of the armistice the great exportation of munitions was stopped and also, to a large extent, that of foodstuffs. This was due to the fact that with the elimination of the submarine menace the European countries found it no longer necessary to keep immense reserves on hand to provide against some possible submarine disaster. Now, however, these countries can use up their reserves without fear, since both supplies and tonnage will be available when they are wanted. This means a temporary curtailment of the exportation of Canadian food

products, and stores in Canada are accumulating rapidly. Exports in December, 1918, were the smallest in three years. There was also in that month an expansion of imports, so that Canada's favorable trade balance was reduced for the month to $34,000,000, against $86,000,000 in 1917, $62,000,000 in 1916, and $46,000,000 in 1915.

Exports of domestic produce and imports entered for consumption for the full twelve months of each of the past seven years, with the balance for or against Canada, are given in the following table:

YEAR	EXPORTS	IMPORTS	BALANCE
1918 . . .	$1,229,208,244	$906,670,404	+$322,537,840
1917 . . .	1,547,430,855	1,005,071,716	+542,359,139
1916 . . .	1,091,706,403	766,501,512	+325,204,891
1915 . . .	614,129,845	450,517,774	+163,612,071
1914 . . .	379,291,000	481,214,000	−101,923,000
1913 . . .	436,213,000	659,061,000	−222,848,000
1912 . . .	341,978,000	635,585,000	−293,607,000

A report of the Dominion Bureau of Statistics gives the following tabular analysis of the character and value of the exports from Canada during the year 1918 and 1917:

	1918	1917
The mine	$75,708,425	$77,389,963
The fisheries	33,577,772	28,323,877
The forest	65,436,204	52,280,875
Animal produce.	176,407,332	170,561,884
Agricultural products . . .	320,524,859	531,300,259
Manufactures	552,683,692	682,431,692
Miscellaneous	5,369,960	5,052,305
Total export, mdse. . . .	$1,229,708,244	$1,547,340,855

The source and distribution and the values of Canadian imports and exports for the years 1918 and 1917 are shown in the following tables:

IMPORTS BY COUNTRIES	1918	1917
United Kingdom	$72,879,109	$91,136,728
Australia	6,084,963	979,018
British East Indies	17,026,095	13,311,740
British Guiana	5,088,972	8,120,098
British South Africa	1,331,842	510,765
British West Indies	8,930,109	11,117,883
Hongkong	2,343,958	1,712,920
Newfoundland	3,287,340	2,743,597
New Zealand	7,014,313	3,351,394
Other British Empire	1,371,069	1,591,579
Argentine Republic	1,726,489	1,761,799
Brazil	1,128,616	1,036,788
China	1,867,405	1,268,662
Cuba	2,034,654	1,047,062
France	3,754,761	5,715,770
Italy	642,071	855,900
Japan	13,184,893	11,100,455
Netherlands	582,507	1,130,855
United States	738,142,064	828,886,594
Other foreign countries	18,533,670	17,692,109

EXPORTS BY COUNTRIES	1918	1917
United Kingdom	$594,250,690	$873,706,892
Australia	11,169,474	8,145,426
British East Indies	2,814,378	4,131,651
British Guiana	2,216,001	2,070,809
British South Africa	9,704,215	4,881,526
British West Indies	8,352,253	6,319,644

EXPORTS BY COUNTRIES	1918	1917
Hongkong	968,766	1,000,475
Newfoundland	10,877,766	8,723,489
New Zealand	4,605,115	4,181,290
Other British Empire	2,505,588	1,519,281
Argentine Republic	2,683,179	1,516,914
Brazil	3,825,859	1,088,269
China	2,934,663	1,471,803
Cuba	4,879,779	3,640,784
France	101,501,396	200,289,282
Italy	9,516,642	2,318,838
Japan	10,624,274	3,766,267
Netherlands	1,026,052	2,102,428
United States	433,232,149	401,479,287
Other foreign countries	12,020,005	14,986,500

A comparison of Canadian imports from and exports to the United States in the last three years follows:

	1918	1917	1916
Imports	$738,142,064	$828,886,594	$592,088,039
Exports	433,232,149	401,479,287	260,924,864
Excess of Imports	$304,909,915	$427,407,307	$331,163,175

Despite the efforts made by Canada to curtail buying from the United States during 1918 in the hope of reducing or eliminating the premium on American dollars in Canada, due to Canada's heavy purchases here and her inability to offset an unfavorable balance with the United States with favorable balances elsewhere, there was little change pro-

portionately. Of every $100 worth of goods imported by Canada during the year, about $81 worth came from the United States, against $82 in 1917 and $77 in 1916. On the other hand the proportion of Canadian exports to the United States to total exports rose to 35 per cent. against 26 per cent. in 1917, the expansion taking place in lines such as pulp, paper, asbestos products, nickel, etc.

Shipbuilding

Canada is very proud of her war record in shipbuilding and the policy now being carried out will not only absorb many hundreds of munition workers and soldiers from Europe, but will also be of great assistance to the export business of the country. In 1914 shipbuilding in Canada was of no importance, the production for the year being only 43,346 tons. With the outbreak of the war the industry was rejuvenated and no less than 381 vessels of various types were constructed during the war. The fourteen yards of the country were kept busy at first with contracts made by the Imperial Munitions Board; later on the Department of Marine and Fisheries arranged a program of building for the Dominion Government. This provides for the construction of forty-three steel ships of a tonnage of 211,800 deadweight and forty-six wooden ships of 128,800 tons deadweight, the former costing $40,000,000 and the latter almost $25,000,000. Since the signing of the

armistice the abandonment of the wooden ship part of the program has been under discussion. Contracts have also been made for ships for the account of Norway and France. The first vessel for Canadian Government account was launched early in December, 1918. It is hoped that before June 1 fifteen ships will have been launched and that before the end of the year 1919 at least thirty will be in the water.

Hydro-Electric Power

Because Canada has had to import so much coal to maintain her railroads and industries, attention has been more and more directed during the war years to the possibility of developing electrical energy through utilization of water power. A table prepared recently by A. M. Beale, Administration Engineer and Dominion Land Surveyor, shows the available water power of the Dominion to be 18,803,000 horsepower. There has been developed so far only 1,735,598 horse-power, which he figures is the equivalent under average conditions to an annual coal consumption of 53,213,000 short tons. This is nearly twice as great as the annual coal consumption of the Dominion.

The Dominion Bureau of Statistics recently completed a survey of central electric power stations, that is, stations developing electrical power for sale.

The capital invested in power stations totals $356,004,168, of which 79.5 per cent is invested in

commercial stations and 20.5 per cent in municipal or public-owned stations. Total employes number 8,840, receiving wages and salaries totalling $7,777,715 per annum.

The total revenue received from the sale of electrical energy was $44,536,848, of which $29,135,399 was secured by commercial and $15,401,449 by municipal plants. The primary power installation in central stations totals 1,844,571 horse-power, of which 78.3 per cent., or 1,444,314 horse-power, is installed in commercial stations, and 21.7 per cent., or 400,257 horse-power, in municipal stations. Of the total primary horse-power installed, 1,652,661 horse-power is derived from water, 180,800 from steam, and 11,710 from gas and oil.

Of special interest is the actual cost of construction of hydro-electric power stations per installed horse-power. Omitting all real estate, transmission, and distribution equipment, seventy representative hydro-electric stations throughout the Dominion, with an aggregate turbine installation of 745,797 horse-power, and a total construction cost of $50,740,458, show an average cost of $69.11 per installed turbine horse-power.

One of the most important facts disclosed by the survey is the outstanding position which water power takes in the central station field. Out of a total installed primary capacity of 1,844,571 horse-power, 1,652,661, or 89.6 per cent.,—practically

90 per cent.,—is derived from water. This figure is indicative of the extent and availability of the water power resources of the Dominion and of the remarkable degree to which their adaptability for central station work has been appreciated in principle and realized in practice.

Development of electric energy by water power is being urged by many Canadians not only as a means of reducing the country's enormous coal bill, but also as a labor saving measure which will enable the laborer to increase his net output. Mr. Beale says that in Great Britain a great deal of attention has been given to the subject and figures have been submitted to prove that the continuance of the upward trend of wages is dependent upon the greater per capita use of mechanical energy. He adds: "The old idea of restricted output in order to keep up prices and wages seems about to give way to the new one of stimulated output, the greater production of marketable manufactures per capita by the introduction of labor-saving devices, automatic machinery, etc., and it seems probable that labor will accept the new regime and share in the rewards of enhanced output."

Canada's Financial Record

No estimate of Canada's resources would be complete without an account of that country's remarkable accomplishments in finance, or without some indication of their bearing upon the future relations

between Canada and the United States. Canada borrowed heavily abroad in the years before the war. E. R. Wood, president of the Dominion Securities Corporation, estimates sales of Canadian bonds for the five years 1910-1914 at $1,417.481,922, of which total Canada absorbed 14.35 per cent., the United States 10.50 per cent., and Great Britain 75.10 per cent. He places the total sales for the war years, 1915-1918, at $2,207,140,715, of which Canada absorbed 61.74 per cent., the United States, 34.06 per cent., and Great Britain, 4.20 per cent. The entrance of the United States into the war threw Canada upon her own financial resources entirely and the manner in which her people accepted the added burden is shown by the fact that the amounts of her war loans and the number of subscribers increased steadily.

In November, 1915, the Government asked for $50,000,000. The amount subscribed was $113,729,-500 and the number of subscribers was 24,862. In September, 1916, the amount asked for was $100,-000,000. Including conversions, the total subscription was $195,371,000, and the number of subscribers, 34,526. In March, 1917, a loan of $150,000,000 was asked for, and, including conversions, a subscription of $236,654,000 was registered, while the number of subscribers went up to 41,000. Another $150,000,000 was asked for in November, 1917. This loan was offered at par with an interest bonus on the first coupon, the rate being 5½ per cent. The subscrip-

tions totalled $419,289,000 and the number of subscribers, increased to 820,035. The amount allotted on these four issues, not including conversions in the second and third loans, was $764,187,800; the average subscription was $4,128; and the subscription per capita rose from $14 in the first loan to $52 in the loan of November, 1917.

The Canadian Victory Loan of November, 1918, begun five days after the signing of the armistice, eclipsed all previous records. The amount asked for was $300,000,000. While the results have not been fully tabulated a statement compiled in January shows a total subscription of $695,389,227. One person in every seven subscribed and the average per capita subscription for the Dominion as a whole was $88.91. The number of subscribers was well over 1,064,000.

To float this loan it was necessary to take from past as well as current savings. Savings deposits in the Canadian chartered banks dropped from $1,076,-000,000 in October, the highest level ever reached in Canadian banking, to $939,000,000 in November, but by the end of January they were up to $990,000,000, a recovery of $19,000,000 in December having been followed by one of $31,000,000 in January. Adding to savings deposits the deposits subject to withdrawal on demand, the total to the credit of the Canadian people on February 1 was $1,613,000,000, as compared with $1,720,000,000

just prior to the last loan. These figures are the more astonishing, considering that the working population of the Dominion, estimated at 8,075,000 in 1914, was decreased by a very large overseas army, when the fact is disclosed that the banks of the country did not take the loan. During the war period the banks subscribed to a total of only $50,000,000 and these bonds were sold to the public in the course of a few months. With such a record Canada faces the future without any fear. Her war debts will be paid quickly, and while interest charges, pensions, and huge sums for reconstruction work and development of her resources will entail heavy burdens upon her, the number of her workers is expected to increase rapidly and there is no voice of pessimism raised within her borders.

America's Interest in Canada

What has been the part hitherto played by the United States in Canada's development, and what is it likely to be in the future? In spite of the fact that the United States in the past has been chiefly pre-occupied with its own internal development, she has contributed a fair share toward Canada's economic expansion. While Great Britain has been largely responsible for the extension of the Canadian railroad system, the United States played the greatest part in Canada's industrial development. It was United States capital that developed the water power

and industries around Sault Ste. Marie. The coal industry of Nova Scotia and the great steel works of Sydney have been built through American enterprise. American promoters have obtained franchises to develop the Canadian side of the Niagara Falls. It was American effort that accomplished the greater part of the development of the Klondike. Half of the great mining industry of British Columbia may be said to belong to United States capital. Two of Canada's leading industries—timber and lumber—are considered to be pre-eminently the development of United States capital. A considerable number of agricultural plants and warehouses have been established by American capital throughout the agricultural areas of Canada. Generally it may be said that as investors the people of the United States have had a great deal to do with the remarkable development of natural resources, agricultural production and production of minerals which has taken place in Canada.

Mr. H. P. Willis, formerly secretary of the Federal Reserve Board, is authority for the statement that the total American investments in Canada prior to the war amounted to more than $600,000,000. The war greatly stimulated American investments in Canada which, according to the best estimates, have nearly doubled during the last four years, reaching the prodigious sum of $1,272,850,000, and distributed as follows:

500 branch firms (average investment $300,000)	$150,000,000
Government, municipal, and corporation bonds (1905-13)	123,743,000
Government, municipal, and corporation bonds (1913-17)	590,506,000
Insurance company investments	94,276,000
British Columbia mills and timber	75,000,000
British Columbia mines	62,000,000
British Columbia Land transactions	60,000,000
Prairie provinces land transactions	41,000,000
City and town properties	20,000,000
Maritime provinces investments	13,125,000
Industrial investments, miscellaneous	12,200,000
Prairie provinces lumber and mines.	10,500,000
Agricultural implement firms	9,250,000
Packing plants.	6,750,000
Theatrical enterprises	3,500,000
Fox Farms (Prince Edward Island).	1,000,000
	$1,272,850,000

There are five hundred branch firms of American industries located in Canada. These branches are usually well provided with working capital and will undoubtedly continue to contribute much to the development and strengthening of industry in Canada.

One of the most effective ways in which the United States has contributed to the economic development of Canada has been through the movement to western and northwestern Canada of agricultural settlers who have been very influential in the development of the great wheat growing section of the Dominion. During the fifteen years before the war the total

number of persons entering Canada from the United States was 1,014,000, while the number of people entering the United States from Canada was 431,000, indicating a net gain to Canada of 583,000 immigrants. Besides being an economic asset to the country as producers of wealth, these immigrants brought with them a considerable amount of wealth, amounting to $192 per immigrant, or a total of $195,000,000 for this fifteen-year period.

Canada's Investments in the United States

United States investment in Canada brought as a natural consequence some Canadian investment in the United States; but this never grew to any great proportions, as Canadian capital was lured away from foreign fields by the attractive opportunities naturally offered by a country so young and undeveloped. For the most part, Canadians showed interest in private corporation holdings, as, for instance, United States Steel Corporation stock, of which the total Canadian holdings in 1914 were $7,892,000. It seems hardly likely that there has been any marked accumulation of American securities in Canada of late, for the need of conserving capital in that country has compelled the Minister of Finance to discourage foreign investment.

After the declaration of war by the United States, and the Government's entrance upon a policy to conserve capital for war purposes, it was not so easy

for other countries to borrow in our open market. This naturally had its bearing on the financial situation in Canada and it seemed as if the United States market was practically closed to Canadian offerings. It appears, however, that the United States Government had placed contracts amounting to $125,000,000 with Canadian munition concerns, and that Great Britain has utilized $400,000,000 of the credit advanced by the United States Government to Great Britain since April, 1917, for the payment of goods that Great Britain has purchased from Canada.

It will be seen that these sums have practically approximated the annual borrowings of Canada from other countries, except for the abnormal year 1917.

Increase in Financial Relations

As has been indicated, the increase in financial relations between Canada and the United States has been an outgrowth of conditions concomitant with the war, and the question may be raised whether in the future there will be a tendency for these financial relations to become permanent. In this connection there are certain considerations which would indicate that after the declaration of peace the financial relations between the two countries should become more important than they were before the outbreak of the present war.

As has been pointed out, one of the important factors in the relations between Canada and the

United States has been the movement of peoples between the two countries. Such movements always tend to bring nations closer together in trade and financial relationship. One of the important economic results of the present world war will probably be an increase in the movement of peoples between countries, and it is not unlikely that the great Canadian northwest will be further developed by the sturdy men of our great Middle West who have had their spirit of adventure quickened, and naturally the opportunities of this region will make an appeal to them.

The Spirit of Adventure

In 1914 the combination of economic forces of the world was preparing for the development of new areas. With the world war quickening the spirit of adventure in man and tending to break down the barriers that had tended to prevent the free movement of peoples between countries, and with the pressure to increase the world's supply of foodstuffs and raw materials, it is probable that in the long term ¡swing, after the declaration of peace, the undeveloped areas of the world will experience a development the magnitude of which we are not able today to gauge. Canada, with her abundance of raw materials, her large forest wealth, her large areas of agricultural land awaiting development, will undoubtedly attract men and capital.

The last quarter of a century has seen a gradual change in the economic life of the United States. Previously we had been in the position of a new country with a frontier constantly being developed and expanded, which was absorbing people and capital of various countries of the world. We have largely developed this frontier area and have built up an industrial capacity to such an extent that before the outbreak of the war we were reaching the point where as a nation there would be surplus funds available for investment. During the European war the industrial capacity of the country has been materially increased, and the United States as a country is in a position to be a lender of capital to other countries. Because we know Canada better than perhaps any other country, and because of the Dominion's great opportunities, our country ought to play a part in the development of the natural resources of Canada which will be beneficial to the industry and enterprise of both countries.

MSH 21646

END OF
TITLE